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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,826	07/14/2005	**Rabah Arhab**	1200.724	4004

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EXAMINER	
LORENCE, RICHARD M	

ART UNIT	PAPER NUMBER
3655	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/523,826	ARHAB ET AL.	
	Examiner	Art Unit	
	Richard M. Lorence	3655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9 and 12-20* is/are rejected.

7)☒ Claim(s) *10 and 11* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04 February 2005* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *2/4/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This is the first Office action on the merits of Application No. 10/523,826.

The preliminary amendment filed on February 4, 2005 has been entered. The title, abstract and claims 1-20 have been amended.

Claims 1-20 are currently pending.

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). A copy of the certified copy of the priority document has been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

Information Disclosure Statement

The information disclosure statement (IDS) submitted on February 4, 2005 has been considered by the examiner.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because in several instances the same reference character has been used to denote different parts as follows:

reference character “26” has been used to designate both the guide washer of Figs. 1-4 having notches 42 and windows 58, and the guide washer of Figs. 5-7 which has no windows or notches;

reference character "28" has been used to designate each of the guide washer of Figs. 1-4 having notches 42 and windows 58, the guide washer of Figs. 5-7 which has no windows or notches, and the guide washer of Fig. 8 which has the deflector 140; and

reference character "50" has been used to designate both one of the edges of the notch 42 (see e.g. Fig. 2 and page 11, line 12), and the circumferentially acting elastic members (see e.g. Figs. 1 and 2 and page 11, line 22).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures.

Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it includes the legal phraseology “means” in line 3. Correction is required. See MPEP § 608.01(b).

The specification is objected to because of the following informalities:

in line 5 on page 5 “converter 1” should read -- converter 14 --;

in line 23 on page 13 “annual” should read -- annular --;

in line 2 on page 14 “surrounds” should read -- is surrounded by --;

in line 6 on page 14 “shaft 82” should read -- shaft A2 --;

in line 12 on page 14 “pistons 76” should read -- piston 76 --;

in line 15 on page 15 “shaft 81” should read -- shaft A1 --;

in line 11 on page 17 “channel V1” should read -- channel V2 --; and

in line 7 on page 27 “and” should read -- an --.

Appropriate correction is required.

Claim Objections

Claims 10 and 11 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n). Claim 10 refers to each of claims 7 and 3, making it an improper multiple dependent claim. Claim 11 depends from the improper multiple dependent claim 10. Accordingly, these claims have not been further treated on the merits.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 and 12-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitations “the input element” (line 11), “the output element” (line 15), “the front axial space” (line 22) and “the front guide washer” (line 22). There is insufficient antecedent basis for these limitations in the claim.

In line 17 of claim 1 the word "means" is preceded by the word “stop” in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word preceding “means” it is impossible to determine the equivalents of the element as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

Claim 3 recites the limitations "the rear axial space" and "the rear guide washer" in line 5. There is insufficient antecedent basis for these limitations in the claim.

In line 2 of claim 5 "the elastic washer" is vague, since both front and rear elastic washers were previously recited in claims 1 and 2.

Claim 5 recites the limitation "the associated guide washer" in lines 3-4. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "the rear guide washer" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitations "the internal periphery of the rear guide washer" and "the external periphery of the turbine hub" in lines 3-4. There is insufficient antecedent basis for these limitations in the claim.

Claim 9 recites the limitations "the rear face of the damper plate" (line 3) and "the rear axial space" (line 4). There is insufficient antecedent basis for these limitations in the claim.

Claim 12 recites the limitations "the central part of the front guide washer" (line 2), "the central part of the rear guide washer" (lines 2-3) and "the associated axial space" in line 4. There is insufficient antecedent basis for these limitations in the claim.

Claim 14 recites the limitation "the external periphery of the damping device" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 15 recites the limitation "the external peripheral edge of one of the guide washers" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim 16 recites the limitation "the rear guide washer" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 17 recites the limitation "the rear guide washer" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 19 recites the limitation "its internal periphery" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 12-17 are rejected under 35 U.S.C. 102(b) as being anticipated by US 6,231,472 B1 (Sudau et al.).

Figure 1 of Sudau et al. discloses a hydrokinetic coupling appliance including a casing (10) formed from first and second shells (13, 19), a driving shaft (3), a turbine wheel (27), a turbine hub (36), a driven shaft (39), a clutch (65), a damping device (100), a supply channel (53 or 54), and a discharging passage (41). Sudau et al. discloses a further embodiment in Figure 5 which is similar to that shown in Figure 1 except for the structure of the clutch and damping device.

In relation to the device defined by applicant's claim 1, the embodiment shown in Figure 5 of Sudau et al. includes a clutch (65a) comprising a piston (63a), friction discs

(150a, 156a), and first and second connecting pieces (152a, 158a); and a damping device (100a) comprising elastic members (102a), guide washers (97a, 168a), a damper plate (95a), and a stop mechanism including the sliding blocks 196a (see Fig. 7 and column 12, lines 1-8). The guide washers are solid and together with the axial area (164a) and the deflector (cover plate 168a) prevent or at least restrict the flow of fluid through the space between the front guide washer and the damper plate.

Claims 1-9 and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by US 6,354,413 B1 (Heller et al.).

Heller et al. discloses a hydrokinetic coupling appliance (1), which as seen in Figure 1 includes a casing formed from first and second shells (2, 3), a driving shaft (the not numbered axially extending portion at the radially inner periphery of the shell 3 and surrounding the stator shaft 10), a turbine wheel (5), a turbine hub (13), a driven shaft (31), a clutch (70), a damping device (40), a supply channel (between the driving shaft and shaft 10), and a discharging passage (between shafts 10 and 31). The clutch comprises a piston (75), friction discs (73, 74), and first and second connecting pieces (71, 43). The damping device comprises elastic members (49), guide washers (41, 42), a damper plate (50), and a stop mechanism (34, 35). The elastic washer (62, see Fig. 3) between the guide washer (42) and the damping plate (50), and the connection between the radially extending region (43b) of the first connection piece (43) and the guide washer (42) each constitute a means for restricting the radial circulation of fluid.

The guide washer (42) can be considered front or rear depending upon the point of reference. Heller et al. thus meets the limitations of both of claims 2 and 3.

The elastic washer is frusto-conical as in claim 4, and is centered by a relief portion (63) in the guide washer (42) as in claims 5 and 6.

Also note the meshing teeth (41a, 35) which rotationally fix the guide plate (41) and the turbine hub as in claims 7 and 8, and the continuous radial surface (24) of the turbine hub as in claim 9.

The windows (48) in guide washer (42) and sockets (51) in the damping plate correspond to the “axial drillings” in claim 18.

The internal splines on the turbine hub of Heller et al. meet the limitations of claims 19 and 20. The embodiments shown in Figs. 12 and 13 also show an axial passage in the turbine hub disposed radially between the two needle-type axial thrust bearings.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 5,964,329 A (Kawaguchi et al.) shows a hydrokinetic coupling (torque converter) in Figure 5 including a lockup clutch (23) and a damping mechanism (60).

US 6,244,401 B1 (Maienschein et al.) shows a hydrokinetic coupling (torque converter) in Figure 3 including a lockup clutch (215), a damping mechanism (213), and elastic washers (244, 245).

US 7,225,908 B2 (Back et al.) does not qualify as prior art, but is cited of interest for the showing of the flow restricting washers 37 shown in Fig. 1, described in the paragraph bridging columns 10 and 11, and recited in claim 12.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard M. Lorence whose telephone number is 571-272-7094. The examiner can normally be reached on Mondays through Fridays from 10:30AM to 7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David D. Le can be reached on 571-272-7092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Richard M. Lorence/
Primary Examiner, Art Unit 3655